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NOTIFICATION CONCERNING  
TRANSMITTAL OF COPY OF INTERNATIONAL  
PRELIMINARY REPORT ON PATENTABILITY  
(CHAPTER I OF THE PATENT COOPERATION  
TREATY)  
(PCT Rule 44bis.1(c))

Date of mailing (day/month/year)  
05 June 2008 (05.06.2008)

Applicant's or agent's file reference  
2960/141WO.

International application No.  
PCT/US2006/045131

International filing date (day/month/year)  
21 November 2006 (21.11.2006)

IMPORTANT NOTICE

Priority date (day/month/year)  
21 November 2005 (21.11.2005)

Applicant

LANG, Philipp

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

To:

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## PATENT COOPERATION TREATY

## PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 2960/14 IWO.	FOR FURTHER ACTION		See item 4 below
International application No. PCT/US2006/045131	International filing date (day/month/year) 21 November 2006 (21.11.2006)	Priority date (day/month/year) 21 November 2005 (21.11.2005)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant LANG, Philipp			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/> Box No. VI	Certain documents cited
<input checked="" type="checkbox"/> Box No. VII	Certain defects in the international application
<input type="checkbox"/> Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis.2).

Date of issuance of this report 27 May 2008 (27.05.2008)
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Authorized officer
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## PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITYTo: Natalie Salem  
7 Fair Oaks Terrace  
Lexington, MA 02421

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference Vert002.00		Date of mailing (day.month/year) <b>11 JUL 2007</b>
International application No. PCT/US 06/45131	International filing date (day month year) 21 November 2006 (21.11.2006)	Priority date (day month year) 21 November 2005 (21.11.2005)
International Patent Classification (IPC) or both national classification and IPC IPC(8) - A61F 2/30 (2007.01) USPC - 623/14.12		
Applicant LANG, Phillip		

## 1. This opinion contains indications relating to the following items:

Box No. I Basis of the opinion  
 Box No. II Priority  
 Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  
 Box No. IV Luck of unity of invention  
 Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement  
 Box No. VI Certain documents cited  
 Box No. VII Certain defects in the international application  
 Box No. VIII Certain observations on the international application

## 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

## 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Date of completion of this opinion 13 April 2007 (13.04.2007)	Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774
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Form PCT/ISA/237 (cover sheet) (April 2005)

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 06/45131

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:

the international application in the language in which it was filed  
 a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

a sequence listing  
 table(s) related to the sequence listing

b. format of material

on paper  
 in electronic form

c. time of filing/furnishing

contained in the international application as filed  
 filed together with the international application in electronic form  
 furnished subsequently to this Authority for the purposes of search

3.  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 08/45131

Box No. V Reasoned statement under Rule 43bis.1(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	6-8, 10 and 11	YES
	Claims	1-5, 9 and 12	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-12	NO
Industrial applicability (IA)	Claims	1-12	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1-5, 9 and 12 lack novelty under PCT Article 33(2) as being anticipated by US 6,855,165 B2 to Fell, et al. (hereinafter Fell).

As per claim 1, at cols. 1-4 (see also figs. 2-5) Fell disclose an implant for treating a facet joint, an uncovertebral or a costovertebral joint, wherein the implant has at least one tapered area (106 femoral face) and wherein the tapered facilitates placement of the implant inside the joint.

As per claims 2, 3, 9 and 12, et col. 6, In 53 to col. 6, In 25. Fell disclose an implant for treating a facet joint, an uncovertebral or a costovertebral joint and kits having a thickness at one or more margins that is less than the thickness in the center of the implant, having a variable thickness, and having the size and shape of the implant adjusted for bone overgrowth (teaching actual shape tailored to individual).

As per claim 4, Fell also discloses the implant having a rounded margin wherein the rounded margin can help reduce damage to adjacent structure (at col. 9, In 27-30, Fell teach contouring surface; see also figs. 2-5).

As per claim 5, et col. 11, In 5-15 (see figs. 4 and 6), Fell disclose an implant of Fell having a first surface that is highly conforming to a first articular surface wherein the conformance include surface features that make with surface irregularities of the first articular surface; and having a second surface (e.g. adjacent to the first surface) that is smooth and allows for free motion between the second surface and a second articular surface (e.g. adjacent to the first articular surface) (see also col. 5, In 53-54; and figs. 2-5, teaching tailoring implant).

Claims 6-8, 10 and 11 lack an inventive step under PCT Article 33(3) as being obvious over Fell in view of Murray.

As per claims 8-8, 10, and 11, as discussed above Fell disclose an implant for treating a facet joint, an uncovertebral or a costovertebral joint, but do not disclose either an instrument to prepare the joint for the implant, to improve the alignment between the joint and the implant, to remove bone spurs, or for distracting the joint and designed to facilitate insertion of the device into the joint. At col. 1, In 8-12, end col. 2, In 54-60, Murray teaches the use of a surgical instrument for treating a bone before placement of an implant. It would have been an obvious exercise of one of skill in the art to combine the teaching of Fell and Murray, because both references teach implants.

Claims 1-12 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 06/45131

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:  
Claims 1, 2, 5, 7, 9, 11, and 12 are objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof: because of the following reasons,

as for claim 1, said taper and the joint lack antecedent basis;  
as for claim 2, the center lacks antecedent basis;  
as for claim 5, said conformance and said second implant surface lack antecedent basis;  
as for claim 7, the joint lacks antecedent basis;  
as for claim 9, the optimal implant size or shape lacks antecedent basis;  
as for claim 11, the device and the joint lack antecedent basis; and  
as for claim 12, the size or shape lacks antecedent basis.